

ANTIMONY - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Antimony	0.795	0.618	8	0.953	0.878	10

Calculated Difference = 0.158
 Standard Error of the Difference = 0.31552261
 Degree of Freedom = 16
 t = 0.500756506
 p = 0.3116
 Data sets significantly different = No

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is not statistically less than background mean

ARSENIC - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Arsenic	1.735	2.233	8	3.438	1.792	10

Calculated Difference = 1.703
 Standard Error of the Difference = 0.783860649
 Degree of Freedom = 16
 t = 2.172580039
 p = 0.0226
 Data sets significantly different = Yes

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is statistically less than background mean

BARIUM - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Barium	198.6	119.4	8	333.1	288.1	10

Calculated Difference = 134.5
 Standard Error of the Difference = 95.59691633
 Degree of Freedom = 16
 t = 1.406949148
 p = 0.0893
 Data sets significantly different = No

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site surface soil mean is not statistically less than background mean

CADMIUM - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Cadmium	0.147	0.112	8	0.0311	0.0398	10

Calculated Difference = 0.1159
 Standard Error of the Difference = 0.029938042
 Degree of Freedom = 16
 t = 3.871328672
 p = 0.0007
 Data sets significantly different = Yes

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is statistically greater than background mean

CHROMIUM - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Chromium	12.93	4.611	8	15.2	3.02	10

Calculated Difference =	2.27	
Standard Error of the Difference =	1.470614137	
Degree of Freedom =	16	
t =	1.543572812	
p =	0.0711	calculated at www.stat.tamu.edu/~west/applets/tdemo.html
Data sets significantly different =	No	site soil mean is not statistically less than background mean

COPPER - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Copper	15.2	7.421	8	12.12	3.955	10

Calculated Difference = 3.08
 Standard Error of the Difference = 2.191731568
 Degree of Freedom = 16
 t = 1.40528158
 p = 0.0896
 Data sets significantly different = No

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is not statistically greater than background mean

LEAD - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Lead	17.54	7.076	8	13.43	1.547	10

Calculated Difference = 4.11
 Standard Error of the Difference = 1.784545276
 Degree of Freedom = 16
 t = 2.303107719
 p = 0.0175
 Data sets significantly different = Yes

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site surface soil mean is statistically greater than background mean

LITHIUM - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Lithium	18.48	4.071	8	21.14	5.166	10

Calculated Difference = 2.66
 Standard Error of the Difference = 1.908832199
 Degree of Freedom = 16
 t = 1.393522176
 p = 0.0912 calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 Data sets significantly different = No site soil mean is not statistically less than background mean

MANGANESE - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Manganese	487.6	124.2	8	377.4	93.75	10

Calculated Difference = 110.2
 Standard Error of the Difference = 42.26460503
 Degree of Freedom = 16
 t = 2.607382701
 p = 0.0095
 Data sets significantly different = Yes

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site surface soil mean is statistically greater than background mean

MOLYBDENUM - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Molybdenum	0.146	0.191	8	0.522	0.0739	10

Calculated Difference = 0.376
 Standard Error of the Difference = 0.051885086
 Degree of Freedom = 16
 t = 7.24678375
 p = 0.0000
 Data sets significantly different = Yes

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is statistically less than background mean

ZINC - POND SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Zinc	332.3	407.7	8	247	364.6	10

Calculated Difference = 85.3
 Standard Error of the Difference = 151.8911495
 Degree of Freedom = 16
 t = 0.561586375
 p = 0.2910
 Data sets significantly different = No

calculated at www.stat.tamu.edu/~west/applets/tdemo.html
 site soil mean is not statistically greater than background mean